

# TECHNICAL DATA SHEET

## Vinyl

Vinyl is one of the most versatile plastics currently available. Depending on the ingredients mixed with the vinyl resin, a compound is formed that can be made rigid or flexible or even semi-liquid, clear or with added color, thick or thin film. Vinyl products are known for their durability, resistance to corrosion, thermal efficiency, color retention, ease of cleaning, safety and other benefits, including recyclability. It is perfect for thermoforming, die cutting, welding, bonding, and folding applications.

<b>TYPICAL PROPERTIES of PVC and CPVC</b>			
ASTM or UL test	Property	PVC	CPVC
<b>PHYSICAL</b>			
D792	Density (lb/in <sup>3</sup> ) (g/cm <sup>3</sup> )	0.051 1.41	0.055 1.52
D570	Water Absorption, 24 hrs (%)	0	0.04
<b>MECHANICAL</b>			
D638	Tensile Strength (psi)	7,500	8,200
D638	Tensile Modulus (psi)	411,000	430,000
D638	Tensile Elongation at Break (%)	-	27
D790	Flexural Strength (psi)	12,800	15,000
D790	Flexural Modulus (psi)	481,000	410,000
D785	Hardness	115 (Rockwell R)	121 (Rockwell R)
D256	IZOD Notched Impact (ft-lb/in)	1.0	1.6
<b>THERMAL</b>			
D696	Coefficient of Linear Thermal Expansion (x 10 <sup>-5</sup> in./in./°F)	6.1	3.7
D648	Heat Deflection Temp (°F / °C) at 264 psi	176 / 80	217 / 103
D3418	Melting Temp (°F / °C)	n.a.	n.a.
-	Max Operating Temp (°F / °C)	140 / 60	200 / 93
C177	Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F) (x 10 <sup>-4</sup> cal/cm-sec-°C)	0.90 3.1	0.95 3.3
UL94	Flammability Rating	V-0	V-0
<b>ELECTRICAL</b>			
D149	Dielectric Strength (V/mil) short time, 1/8" thick	544	1250
D150	Dielectric Constant at 60 Hz	3.2	3.7
D150	Dissipation Factor at 60 Hz	.0096	-
D257	Volume Resistivity (ohm-cm)at 50% RH	5.4 x 10 <sup>15</sup>	3.4 x 10 <sup>15</sup>

### Benefits

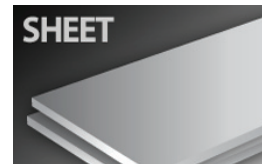
- Dimensional stability
- Lays Flat
- Printable
- Moisture and Oil resistant
- Good clarity, high Gloss
- Acid Free
- Contains no plasticizers
- Easily fabricated

### Applications

- Medical
- Construction
- Industrial
- Automotive

Sizes available upon request

### SHAPES AVAILABLE



NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets.  
All values at 73°F (23°C) unless otherwise noted.